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(54) **DISPLAY SYSTEM AND METHOD FOR PROVIDING VARIABLE ACCOMMODATION CUES USING MULTIPLE INTRA-PUPIL PARALLAX VIEWS FORMED BY LIGHT EMITTER ARRAYS**

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(57) **ABSTRACT**

A display system is configured to direct a plurality of parallactically-disparate intra-pupil images into a viewer's eye. The parallactically-disparate intra-pupil images provide different parallax views of a virtual object, and impinge on the pupil from different angles. In the aggregate, the wavefronts of light forming the images approximate a continuous divergent wavefront and provide selectable accommodation cues for the user, depending on the amount of parallax disparity between the intra-pupil images. The amount of parallax disparity may be selected using an array of shutters that selectively regulate the entry of image light into an eye. Each opened shutter in the array provides a different intra-pupil image, and the locations of the open shutters provide the desired amount of parallax disparity between the images. In some other embodiments, the images may be formed by an emissive micro-display. Each pixel formed by the micro-display may be formed by one of a group of light emitters, which are at different locations such that the emitted light takes different paths to the eye, the different paths providing different amounts of parallax disparity.